

## **DETAILED ACTION**

This Office Action is in response to Applicant's Amendment dated 5/20/2008.

### ***Allowable Subject Matter***

1. Claims 17-19, 22-26, 28-31 are allowed.
2. The following is an examiner's statement of reasons for allowance:
  - Recorded Prior Art fails to disclose or suggest combination structure of a transistor as characteristics recited in base claim 17 comprising a plurality of nanotubes extending between said source and drain regions, said nanotubes having functionalized ends with attached functional groups, wherein said nanotubes have opposed first functionalized ends coupled to said source region and second functionalized ends coupled to said drain region, said first functionalized ends attracted to said source region and not said drain region.
  - Recorded Prior Art fails to disclose or suggest combination structure of a transistor as characteristics recited in base claim 23 comprising a plurality of open ended nanotubes extending between said source and drain regions, said nanotubes having functionalized ends with attached functional groups, wherein said nanotubes have opposed first functionalized ends coupled to said source region and second functionalized ends coupled to said drain region, said first functionalized ends attracted to said source region and not said drain region.

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► Recorded Prior Art fails to disclose or suggest combination structure of a transistor as characteristics recited in base claim 28 comprising a plurality of nanotubes extending between said source and drain regions, the opposed ends of each nanotubes having different functional groups attached to the opposed ends.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhha Pham whose telephone number is (571) 272-1696. The examiner can normally be reached on Monday and Thursday 9:00AM - 9:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thanhha Pham/  
Primary Examiner, Art Unit 2813